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"Call Before You Fall"

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Implementing a Campaign to Decrease Falls in the Medsurg Unit

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Abstract

National organizations such as the Centers for Disease Control and Prevention (CDC) and the Collaborative Alliance for Nursing Outcomes (CALNOC) have prioritized reduction of inpatient falls as a patient safety goal. An improvement project utilizing the model for improvement and Plan-Do-Study-Act (PDSA) cycles was conducted on a 40-bed unit that provides care to cardiac, and medical-surgical patients. The current fall prevention quality council team is composed of nurses and interdisciplinary clinicians, who focus on improving clinical and financial outcomes related to fall prevention and potential injuries. A Clinical Nurse Leader (CNL) was asked to lead a practice improvement project in response to chart audits and observational rounding that indicated a gap in patient awareness of fall prevention activities and lack of consistent implementation of established fall prevention measures by nursing staff. The aim of this project was to increase awareness and knowledge of patients related to fall prevention and staff education to improve reliability of implementation actions to reduce falls. Data was collected over a three-month period and new interventions including a fall prevention tool kit and communication campaign – "Call Before You Fall" were developed and implemented to reduce fall rates by 50% every month. Results from staff education are expected to improve based on pre and post data comparison of education provided during shift huddles. Data results post intervention proved to decrease the rate of falls. Clearly, fall prevention activities need to address both communication and education interventions to improve fall reduction outcomes.

Keywords: falls, prevention, medical-surgical, clinical nurse leader, Schmid Scale

Clinical Leadership Theme

The global aim of this project is to improve fall rates in the medical-surgical unit. The process begins with the patient's admittance to the medical-surgical unit. The process ends when the patient is discharged from the unit. By working on the process, we expect to decrease the fall rates every month. It is important to work on this now because between 700,000 to 1 million patients suffer from falls in hospitals each year. At least 50% of patients who fell resulted in an injury. Medicare and Medicaid services stopped reimbursing hospitals from extra medical services related to in-patient falls since 2008.

To meet the objective, a campaign of "Call Before You Fall" was initiated to improve safety of patient care. This project focuses on quality improvement (QI) that intertwines with the Clinical Nurse Leader (CNL) curriculum and competency in accordance to the American Association of Colleges and Nursing (AACN). This student CNL will function as an outcomes manager in decreasing the rate of falls in the medsurg unit by utilizing evidence based improvement tools.

Statement of the Problem

In the medsurg unit, there is an increasing rate of falls that is related to nursing staff not being able to apply the fall prevention techniques related to the fall risk scale or the Schmid scale (Appendix A). The biggest concern is that there is no follow through with the application of the fall prevention process although patients are scored as a high fall risk (HFR) such as not placing bed alarms to HFR patients. As a result, patient safety is threatened and the problem needs to be addressed. In addition, there is a gap of patient education regarding requesting assistance from the nurse before getting out of bed. Evidence based research shows that staff knowledge and proper application of fall prevention techniques greatly reduces the incidences of falls within a

microsystem (Wilbert, 2013). The purpose of this project is to reduce the rate of falls in the medsurg unit by improving staff education and increasing patient education of calling the nurse before getting out of bed by initiating the "Call Before You Fall" campaign.

Project Overview

The "Call Before You Fall" campaign's ultimate goal is to reduce falls in the medsurg unit and therefore improve quality and safety outcomes. The campaign will raise awareness to nursing staff and the patients regarding the consequences of falls and how it can be prevented. The "Call Before You Fall" campaign incorporates two main interventions for the nursing staff, which are the application of fall kits (Appendix B) and pictographs (Appendix C) in the patient's room to remind patients to call their nurses before getting out of bed. The plan is properly identify high fall risk (HFR) patients from the ER when getting report. If the patient scores more than 3 in the Schmid Fall Scale (SFS), the fall kit should automatically be initiated together with the pictographs. The fall prevention kit includes a pair of yellow non-skid socks, a yellow armband, a yellow blanket and a yellow falling star magnet that is placed outside the patient's door. The goal is to differentiate HFR patients from ambulatory patients that scored low on the Schmid Scale. During shift change report by bedside, the nurse has a checklist in the room that checks whether the bed is in its lowest position, the brakes are turned on, two upper side rails are up, and the bed alarm is on. It is imperative to educate the patient every shift to call before getting out of bed during physical assessment. This is time when nurses are assessing their patient's gait and ability to ambulate independently. During shift huddles, the charge nurse lets the nursing staff now which patients have their bed alarms on to further raise awareness which patients have fall precautions. The team meets every month with the nursing staff to determine

that effectiveness of the campaign. The fall prevention team members consist of a clinical nurse leader, nurse manager, charge nurse, physical therapist, and a physician champion.

Rationale

The Collaborative Alliance for Nursing Outcomes (CALNOC) is an organization that provides reports and analytics affecting patient quality and safety. CALNOC created the first database registry of nursing sensitive indicators and transform it into powerful information to help guide executives to redirect practices for improving patient outcomes. According to CALNOC (2017), falls are defined as "The rate per 1000 patient days at which patients experience an unplanned decent on the floor." Minimized or assisted falls by staff are also considered a fall and must be reported. Intentional falls are excluded from the report. In other words, if a patient falls on purpose, it is not reported since it does not fall according to CALNOC definitions. The falls reported are described by level of injury whether with or without injury and if it is observed, not observed, assisted, or non-assisted at the time of fall. Patient days are used by the CALNOC database to calculate each facility's fall rate (Appendix D). A root cause analysis (RCA) was done to determine the cause of falls in the medsurg unit using a fishbone diagram (Appendix E) to clearly illustrate the gaps and where should the CNL focus on improving. The CALNOC report showed an increasing rate of falls in the medsurg unit without any injuries. A pre-intervention analysis was done and showed non-compliance of nursing staff regarding the application of the fall prevention kit. Patient falls are related to not having bed alarms on and non-skid socks even though they scaled as HFR patients with the Schmid scale.

In my microsystem a 3-month review of fall data was done and shows a significant increase of falls from May 2017 to June 2017 (Appendix F). Falls from May have a total of 2 and

went up 10 falls in a month. 50% of falls occurred during shift change where nurses are staying at the nurses' station rather than giving bedside report. Apart from the patient safety, hospital cost has been rising in relation to falls. Medicare and Medicaid do not reimburse the hospital if the patients go through a hospital-acquired injury. It is not only a growing safety issue but also a financial problem (AHRQ, 2013). These are preventable falls that can be improved after interventions are in place.

Methodology

A pre-intervention analysis is done whether nursing staff is applying the fall prevention kit. In my microsystem, the Schmid scale is incorporated in the electronic health record (EHR) therefore nurses are mandated to assess and score each patient during their charting. There is 100% compliance with scoring each patient but nursing intervention falls with the follow up of the score. I rounded on all the patients that are high fall risk and bed alarms are not in place and no yellow blankets are in place. Some of the patient's doors are have yellow falling star magnets and some do not. A meeting was held to find out why nursing staffs are not following through the fall prevention intervention. Staff education regarding the use of fall kits and pictographs and reinforce patient education as well. Staff was engaged, verbalized understanding and agreed to implement the changes. The nursing staff was very vocal about their concern with the current fall prevention kit. They voiced out that the falling star magnets are too small for the staff and patients to see and bed alarms are scarce in the medsurg unit and may not have enough for all high fall risk patients. The nurse manager agreed to work on the budget to get more bed alarms and work out some of the designs of the falling star magnet. Two weeks after the meeting, I completed a Plan, Do, Study, Act (PDSA) cycle to evaluate (Appendix G) and assess how to make strategic positive compliance in the "Call Before You Fall" campaign (AHRQ, 2013).

After two weeks another PDSA will be done to execute positive changes and re-evaluate the effectiveness of the interventions.

Data Source

The CALNOC monthly report will be compared before and after the fall prevention intervention. Staff compliancy will also be monitored with monthly auditing in relation to application of the fall prevention kit and patient teaching. Data is continuously tracked and collected on a monthly basis to assess gaps and areas of improvement. Data was collected from observational rounding, chart audits, and monthly rate falls within the microsystem. Shift huddles and meetings are held to collect feedback from nurses. Patient education is measured by verbalizing patient understanding and nursing feedback regarding the use of call lights before getting out of bed.

Literature Review

Evidence based practice has always been the paramount of CNLs in creating a transformational change within a microsystem. The literature review included in this project was searched using the CINAHL database and Ebscohost.

Ambutas (2017) stresses the importance of nursing staff knowledge regarding the use of Schmid scale, early identification of high fall risk patients, and fall tool kits. Researched showed that utilizing fall tool kits greatly reduced the number of falls in the medsurg unit. Ambutas' research article showed the importance of the fall tool kits, which is the biggest part of my project to decrease the amount of falls (CDC, 2014).

Graham (2012) encapsulated the most recent evidence regarding the fall prevention interventions. Graham identified four areas of fall prevention: Medication review, technology, fall teams, and environmental aids. He strongly voiced for surveillance monitoring of patients that are prone or high risk of falling when nurses do not have direct view of the patient at all times.

Woodall (2016) reiterates the importance of patient assessment and early identification of high fall risk patients. Woodall mentions that physical assessment is not enough but to also consider extrinsic and intrinsic factors that can contribute to the patients risk of falling. Some of the considerations include: age, diagnosis, medication, and many more.

Spoelstra, Given & Given (2012) summarizes the hospital's need for multifactorial fall prevention interventions that targets staff and patient safety, bed alarm, fall risk scale, and additional needs such as toilet transferring aids. Spoelstra, Given & Given believes that fall risk are caused by different environmental factors such as poor lighting and cluttered room. They also stress that behavior can play a hug part when patients fall without calling. This talks about the impulsiveness of the patient and erratic behavior of getting out of bed on their own. In other words, nursing staff should assess the psychiatric behavior of patients and their potential to have impulsive actions.

Hicks (2015) edified the association of nursing rounding to decreased fall occurrences. Hicks talks about rounding as meeting the patient's needs and that is why there is less likely for the patient to try to get what they need on their own thus, decreasing the fall occurrences. She stresses the need for nurses to meet with their patients and further improve patient safety outcomes.

Tzeng & Yin (2012) discusses that patient falls occur when they try to go to the bathroom independently without calling their nurse or any assistance. The authors insist that patients who scores a high fall risk, their respective primary nurses should meet their needs at a timely manner to avoid impulsive behaviors such as trying to get out of bed on their own to go to the bathroom. Staff education regarding meeting patient needs must be part of the nursing routine to avoid sentinel events.

Timeline

A Gantt chart (Appendix H) is completed to show the timeline of pre and post intervention in decreasing the rate of falls in the medsurg unit. I completed a pre and post intervention audit. Meetings were held in response to staff education and regular updates within the fall committee. A total of four weeks was invested into the planning phase of implementation and how to execute interventions appropriately. Please see Gantt Chart.

Expected Results

The initiation of "Call Before You Fall" campaign is expected to decrease the rate of falls in the medsurg unit by 50% within 3 months. Results from post intervention show an above average score of 90% decrease of falls. The fall rates from June dramatically decreased from 10 to 1 in July. Application of fall prevention kits, staff and patient education was effective (Appendix I).

Nursing Relevance

The utilization of evidence-based practice is critical in regards to patient safety and quality. Falls are proven to be one of the major concerns with hospitalize patients. CNLs and nurses work to the utmost goal to maintain quality of care and safety. Falls does not only cause injury to patients, but are also very costly. Nurses are in the front lines in providing direct patient

care, it is important that nurses are educated in how to prevent falls that can cause potential harm to patients. Application of the fall prevention campaign can further help nurses evolve as safe care providers and raising standards of quality of care.

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Appendix A

HRN: Site: DOB: yyyy/mon/dd

Last Name: First and Additional Names:

PHN: Gender: Age in Years:
Admitting Physician: Encounter #:

Address: Street, City, Province, Postal Code

Telephone Number:
Date of Admission: yyyy/mon/dd Family Physician:

Schmid Fall Risk Assessment Tool – Acute Care

To be completed on all patients upon admission, post-fall, and/or when the patient's status changes.
Score each area relating to patient's current status. Weights are in parenthesis. Total weight at bottom.

Date of **Initial** Assessment: yyyy/mon/dd **Unit:** _____

Select only **one indicator for each category.

Mobility	Score	Score
(0) Ambulates with no gait disturbance		
(1) Ambulates or transfers with assistive devices		
(1) Ambulates with unsteady gait and no assistance		
(0) Unable to ambulate or transfer		
Mentation	Score	Score
(0) Alert, oriented X 3		
(1) Periodic confusion		
(1) Confusion at all times		
(0) Comatose / unresponsive		
Elimination	Score	Score
(0) Independent in elimination		
(1) Independent, with frequency or diarrhea		
(1) Needs assistance with toileting		
(1) Incontinence		
Prior Fall History (within past 6 months)	Score	Score
(1) Yes – Before admission (Home or previous inpatient care)		
(2) Yes – During this admission		
(0) No		
(0) Unknown		
Current Medications	Score	Score
(1) A score of 1 is given if the patient is on 1 or more of the following medications: Anti-convulsants / sedatives or psychotropics / hypnotics *(consider all medication side effects and role in fall risk.)*		
	Score	Score
Total Score:		
Completed By: (signature / designation)		
Date: (yyyy/mon/dd)		

Total Score
Score of 3 or more: Patient is at risk for falls and fall prevention interventions should be implemented – **see reverse side**

Appendix B

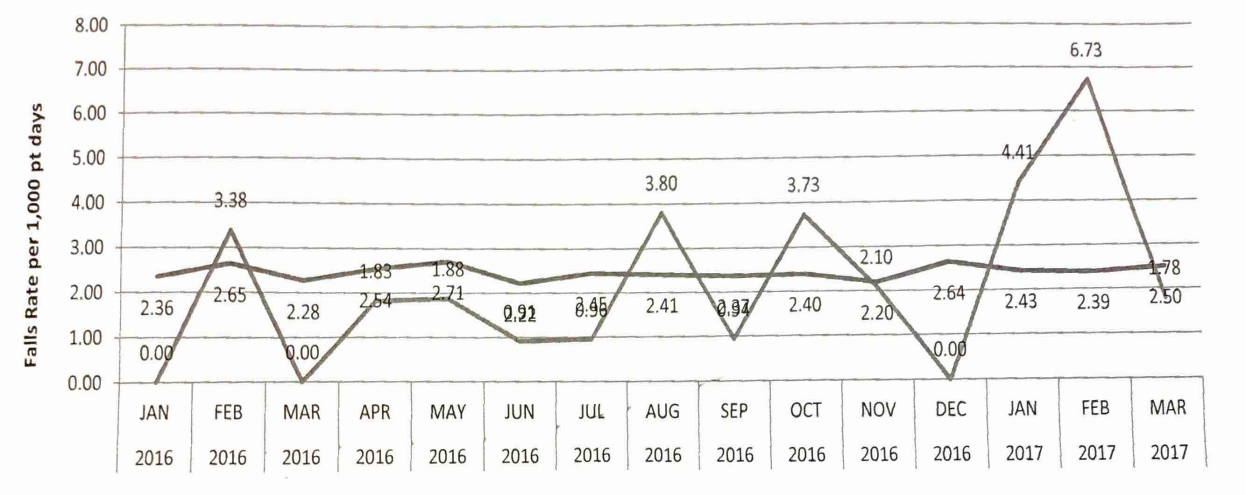
Fall Prevention Kit

Appendix C

Fall Prevention Pictograph

Appendix D

CALNOC Fall Data

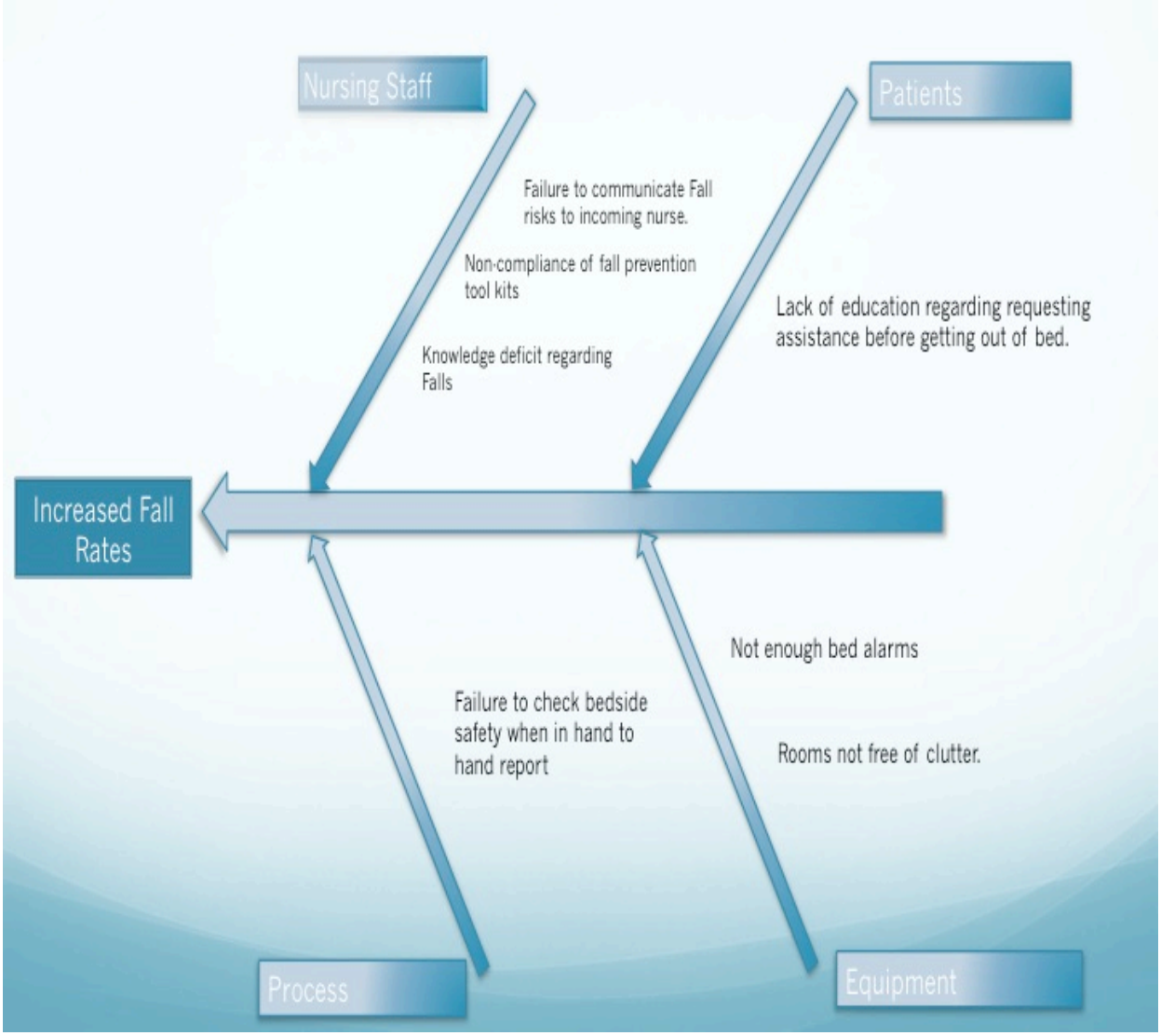


Falls per 1000 Pt Days — CALNOC Mean

Year	Month	Numerator	Denominator	Falls per 1000 Pt Days	CALNOC Mean
2016	JAN	0	1,112	0.00	2.36
2016	FEB	4	1,182	3.38	2.65
2016	MAR	0	1,059	0.00	2.28
2016	APR	2	1,093	1.83	2.54
2016	MAY	2	1,064	1.88	2.71
2016	JUN	1	1,093	0.91	2.22
2016	JUL	1	1,044	0.96	2.45
2016	AUG	4	1,053	3.80	2.41
2016	SEP	1	1,065	0.94	2.37
2016	OCT	4	1,073	3.73	2.40
2016	NOV	2	954	2.10	2.20
2016	DEC	0	1,150	0.00	2.64
2017	JAN	6	1,362	4.41	2.43
2017	FEB	7	1,040	6.73	2.39
2017	MAR	2	1,123	1.78	2.50

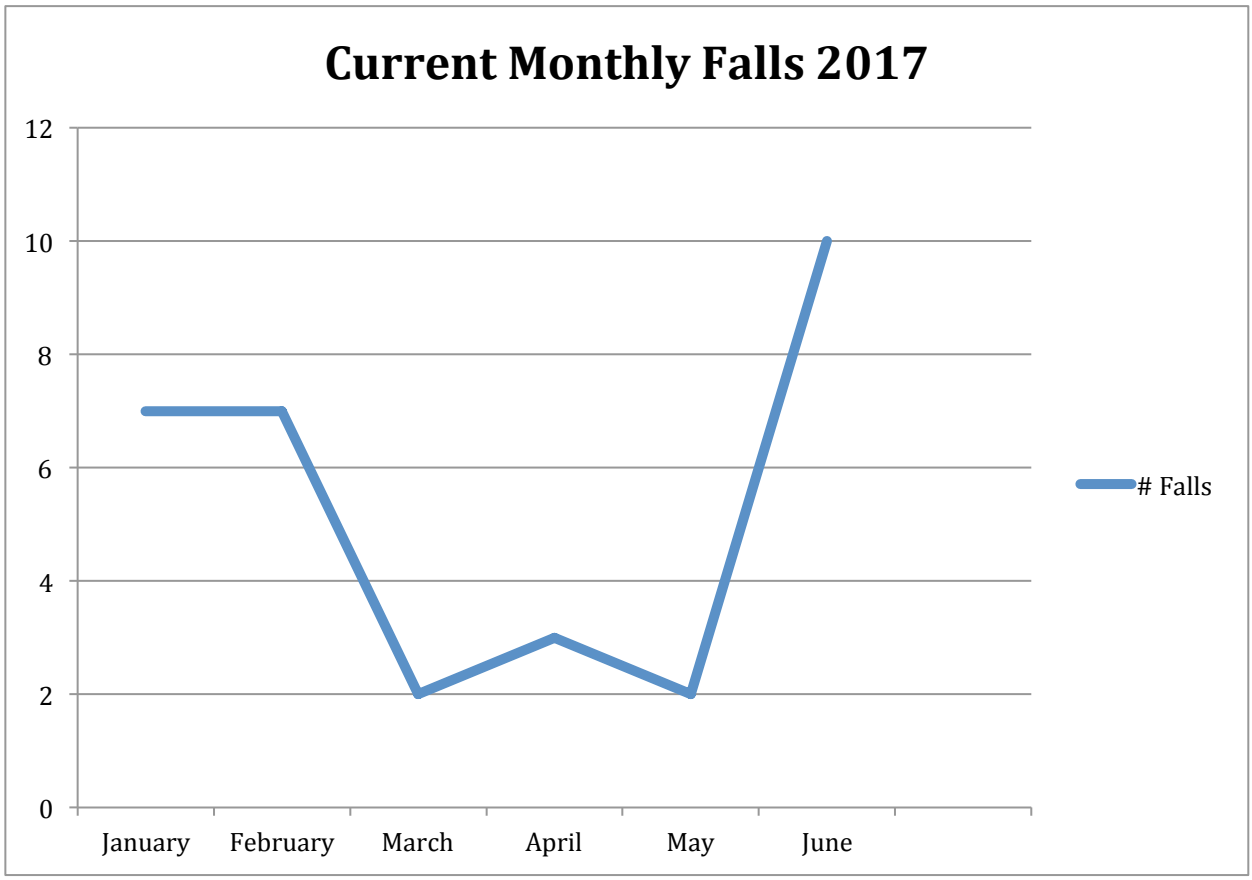
Appendix E

Root Cause Analysis Fishbone Diagram



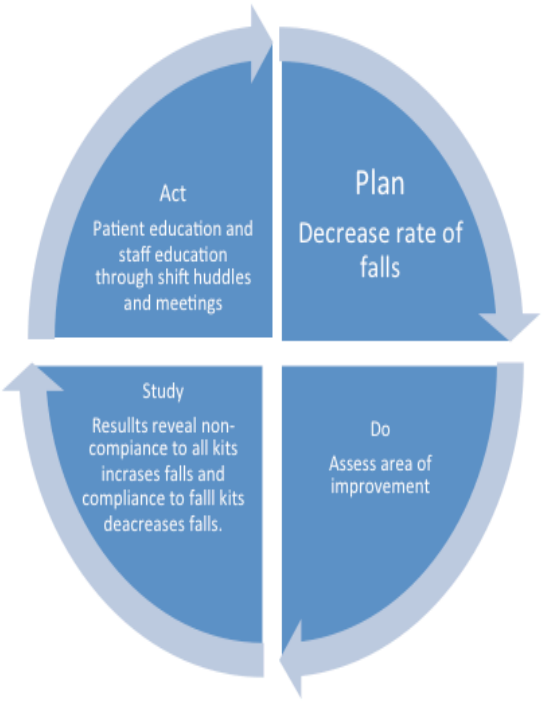
Appendix F

Monthly Fall Rate Data



Appendix G

Plan-Do-Act-Study (PDSA) Cycles 1 & 2



Appendix H

Gantt Chart June to July 2017

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Action Item	Responsible									
Planning	CNL/Team									
Shift Huddles with Staff	CNL									
PDSA	CNL									
Observational Rounding	CNL									
Chart Audits	CNL									
Staff Meetings	CNL/Team									
Patient Education	CNL/Team									
Project Evaluation	CNL									

Appendix I

Current Monthly Fall Rates 2017